

## GLOSSARY LIST OF RELEVANT TERMS:

APPEND COMMAND: This is a command in conjunction with the COPYAUDIT utility program and is used to attach or append a particular Audit File at the end of a particular position on the tape.

ASSOCIATED FILE NAME ATTRIBUTE: This contains the exact location of the disk file containing all the information about all of the tape volumes comprising the Tapeset in question.

AUDIT FILE NUMBER (AFN): Audit File titles (names) associated with each database contain a sequential number, that begins at one (1) and is incremented for each new audit file created by a database.

AUDIT FILE PHYSICAL ATTRIBUTES: These specify information about a file, including those on magnetic tape. For tape files they include the serial number, the cycle and version number. Cycle and version numbers can be used to differentiate between tapes that have the same title. Cycle is the higher order of the pair.

AUDIT FILE RECORD ENTRY: This is information in Audit File record which contains certain attributes which include the "starting" and the "ending" positions of the audit file which is to be extracted or stored. For any given TAPASET's Directory each Audit File has one record (entry) that contains all of the information required for locating the Audit File on a particular reel of tape within the TAPASET.

AUDIT FILE: Audit Files are files which contain a history of the changes made to an audited database. They are a necessary component of any database recovery process. Audit Files indicate all changes made to a database.

AUDIT RECORD ENTRY (FIG. 6): See Audit File Record Entry.

AUDIT TRAIL: In reference to computing, this is a means of tracing all activities affecting a piece of information, such as a data record, from the time it is entered into a system, to the time it is removed from the system. An Audit Trail makes it possible to document, for example, who made changes to a particular record and when they did it.

CLOSE WITH RETENTION: The physical file remains assigned to the logical file. This permits files to be closed without releasing control of the file. One of its uses is for positioning to a particular file on a multi file tape reel.

COPYAUDIT: The COPYAUDIT is a utility program which enables one to perform certain Audit File management tasks, such as (i) copying audit files from one medium to another; (ii) printing or displaying online the directories for Audit File tapes; (iii) verification of the contents of Audit Files.

DIRECTORY RECORD (IN DISK DIRECTORY FILE): This is a record inserted in the Disk Directory File. See also, Audit File Record Entry.

DIRECTORY: An accumulation of information about files and their attributes (e.g. Title, Creation Date, Location, etc.).

DISK DIRECTORY FILE: This is the file which contains the volumes and audit files information on a Tapeset. The disk directory file is used to access audit files on a Tapeset.

DMSII (DATA MANAGEMENT SYSTEM): A specialized system software package used to describe the database schema, maintain the relationships among the data elements, and manage the data in the database. This is described in *Unisys Publication Part No. 8807 6625 000, September 1997, entitled "Unisys: Getting Started With DMSII"*.

EVENT HISTORY (OF ACTIONS ON SERVER 15): The occurrence of all changes to the data within a database (i.e. the addition, deletion, or modification of data within a database).

FAST LOCATE TAPE DRIVE: This is a feature of modern, high capacity, tape drives which allows programs to rapidly position to a file or location within a file that is located on a reel of magnetic tape that resides on the tape drive.

FILE NAME: (1) A unique identifier for a file, consisting of 1 to 14 name constants separated by slashes. Each name constant consists of 1 to 17 letters, digits, hyphens, and/or underscores. A file name can be optionally preceded by an asterisk (\*) or a user code, and, optionally, can be followed by ON and a family name when the file resides on disk.

LOGICAL TAPE (For Loaded Volume): Single or multiple reels of tape that contain a contiguous set of files, including Audit Files. Further, the Audit Files themselves are allowed to span multiple reels of tape.

MAXFILESPERTAPE VALUE: An attribute that can be specified for DMSII databases. It tells the data management system how many Audit Files can be stored within a logical tape.

PHYSICAL REEL (OF A TAPE SET, FIG. 4): This is a unit of recording area known as a "Volume".

READPOSITION DIRECT: READPOSITION\_DIRECT is programming language statement that directs the operating system to position directly to a particular location on a reel of tape. Analogous to positioning to a particular record within a random access type of file structure such as disk.

SEGMENT-HEADERS: This is a means by which a tape is formatted, such as by writing multiple segment headers free from any interleaved access of user data. Segment-headers contain a unique key which is copied into a key index to identify valid segments.

SERIAL NUMBER (OF EACH VOLUME): There is a serial number which is associated with each tape volume.

STANDARD OPERATING SYSTEM FUNCTIONS: Actions performed by the operating system on behalf of programs. They include, but are not limited to, such tasks as opening and closing files; handling the details of communicating with a peripheral device such as a disk or tape (i.e., initiating and completing an I/O (read or write) operation; starting and stopping programs; etc.

STARTING POSITION (Of Audit File): The location on a reel of tape where the first record of an Audit File is physically located.

SYSTEM CONTROL FILE (FOR DATABASE): This is a control file for the database which stores the Tapeset number. See *Disk Directory File*.

TAPE VOLUME MARKER FILE NAME: This is a name which uses the Database name and the Tapeset number to identify a particular set of Audit Files (e.g. <Database Name>/TAPESET<n>).

TAPE VOLUME MARKER FILE: This is the first file contained on each physical reel (Volume) of a Tapeset.

TAPESET NUMBER: This is numerical identification of a logical tape on which several Audit Files reside.

TAPESET: Grouping of Audit Files on a particular tape. Note that a TAPESET may be comprised of multiple physical reels of tape and that each physical reel may contain multiple Audit Files.

VOLUME: This represents a physical storage unit such as a hard disk, a floppy disk, a disk cartridge, or a reel of tape. It can also designate a logical storage unit which is part of one physical drive or one that spans several physical drives.

VOLUME RECORD ENTRY: This is an entry in the Disk Directory File which contains the first and the last Audit File numbers on that Volume and the list of all the Audit Files and their physical attributes (serial number, cycle and version) that are present on that Volume.